









Lynn Conway

Professor of Electrical Engineering and Computer Science, Emerita, University of Michigan, Ann Arbor

After earning her BS and MSEE from Columbia University's School of Engineering and Applied Science, Lynn joined IBM Research, where she made foundational contributions to computer architecture. Sadly, <u>Lynn was fired by IBM</u> when she underwent gender transition as one of the early pioneers, way back in 1968.

As a result, Lynn had to start her career all over again, at the bottom of the ladder in a secret new identity. Rising rapidly in the ranks she soon became a computer architect at Memorex, yet lived in fear of 'outing' as if a foreign spy in her own country.

Recruited by Xerox Palo Alto Research Center in 1973, Lynn went on to invent powerful methods for silicon chip design, becoming principal author of the famous Mead-Conway VLSI-design textbook and pioneering how to teach the new methods at M.I.T. – thus launching a world-wide revolution in silicon microchip design in the 1980's.

Lynn also invented an internet-based <u>e-commerce infrastructure for rapid silicon-chip prototyping</u>, spawning the modern 'fabless-design' plus 'silicon-foundry' business-model for semiconductor design and manufacturing. Institutionalized by DARPA, the resulting "<u>MOSIS</u>" system enabled the rapid development of thousands of chip designs, leading to many major company startups in the 80's, 90's and beyond.

As Assistant Director for Strategic Computing at DARPA, Lynn next crafted the meta-architecture and led the planning of the Strategic Computing Initiative, a major 1980's DOD effort to build the technology-base for modern intelligent-weapons systems. Lynn joined the University of Michigan in 1985, as Professor of EECS and Associate Dean of Engineering, where she continued her distinguished career.

Lynn 'came out' about her past in 1999, and went on to build a major transgender support website. Translated into eighteen languages, her site has for more than a decade given hope and encouragement to transgender people worldwide. Now retired, she lives with her engineer husband Charlie on their 23 acre homestead in rural Michigan. They've been together 26 years.

In 2012, the <u>IEEE</u> published Lynn's "<u>VLSI Reminiscences</u>" in a special issue of the <u>Solid-State Circuits Magazine</u>, in which she finally revealed how she conceived the ideas and orchestrated the long-ago events that have changed the world.

Specialties: Computer science, system architecture, electrical engineering, microelectronic design, research management, engineering education, innovation and human rights advocacy.

Links: Homepage, LinkedIn, Wikipedia, "VLSI Reminiscences", "The Many Shades of 'Out'"

Awards and recognition: Fellow of the IEEE; Research Fellow, Xerox Corporation; Pender Award of the Moore School, University of Pennsylvania; Wetherill Medal of the Franklin Institute; National Achievement Award, Society of Women Engineers; Secretary of Defense Meritorious Achievement Award; Member, U.S. Air Force Scientific Advisory Board; U.S. Air Force Academy Board of Visitors, Presidential Appointment (President Clinton); Engineer of the Year Award, National Organization of Gay and Lesbian Scientific and Technical Professionals; Stonewall 40 Trans Heroes; Electronic Design Hall of Fame; Major Educational Innovation Award, IEEE EAB; Computer Pioneer Award, IEEE Computer Society; Member of the Corporation, Emerita, Draper Lab; Honorary Doctorate, Trinity College; Member, National Academy of Engineering.